

REMARKS

As a preliminary matter, with regard to the **Corrected** Form PTO-1449 (Information Disclosure Citation) submitted on April 5, 2007, this Corrected Form was submitted to correct a typographical error in which Applicant inadvertently listed U.S. Patent No. 5,307,830 (Welker) as 5,037,830. Thus, the correct patent number for this reference is not already of record. Accordingly, enclosed is an additional Corrected Form 1449 which correctly lists the patent number for the Welker patent. Applicant requests that the Examiner either initial all entries and substitute this form for the original form, or initial only the entry near the Welker patent, and include this form to supplement the original form.

Claims 1, 6-8, 12 and 13 stand rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 4,420,016 to Nichols. Applicant respectfully traverses this rejection.

Applicant respectfully submits that the cited reference fails to disclose all of the features of the present invention. More specifically, the Nichols reference fails to disclose a fluid flow stabilizer that includes, *inter alia*, a flow straightening device that “comprises one or more longitudinally extending vanes, wherein radially outer edges of said vanes contact one of said first and second flanges, but are separated from said internal diameter of a remainder of said fluid conduit section, such that a space is defined therebetween,” as defined in amended independent Claim 1. Similarly, with regard to independent Claim 6, the Nichols reference also fails to disclose a stabilizer that includes, *inter alia*, a flow straightening device that “comprises at least four vanes, with each vane arranged adjacent to

perpendicular vanes, and wherein radially outer edges of said vanes contact one of said first and second flanges, but are separated from said internal diameter of a remainder of said fluid conduit section, such that a space is defined therebetween.”.

One example of the flow straightening device of independent Claims 1 and 6 is shown in Applicant’s Figure 2, which shows flow straightening device 50 within flow stabilizing device 22 (see also Applicant’s Figure 1). As can be seen in Figure 2, this embodiment of the flow stabilizing device 22 includes a first flange 25 and a second flange 31, with a fluid conduit section 38 defined between flanges 25 and 31. The fluid conduit section 38 has an internal diameter defined by layer 42. The Figure 2 embodiment also includes a flow straightening device 50, which, in this embodiment, is in the form of a plurality of vanes 52. As defined in independent Claims 1 and 6, “radially outer edges of said vanes [52] contact one of said first and second flanges [25 or 31], but are separated from said internal diameter of a remainder of said fluid conduit section [38], such that a space is defined therebetween.” As recited in paragraph [0032] of the present application, the space defined between the outer radial edges of the flow straightening device 50 and the internal diameter of the conduit section 38 allows for lateral or radial movement of the end 30 of the fluid conduit section 38, without causing the vanes 52 to come into contact with the inside layer 42 of the conduit section 38.

In contrast, in the Nichols reference, vanes 27 of Figure 3 must make contact with the internal diameter of hose 31 (Figure 5) in order for spine 21 to operate for its intended purpose of preventing kinks in hose 31. There is no disclosure that vanes 27 of the

Figure 3 embodiment of the Nichols reference, or that the vanes of any other embodiment of the Nichols reference, contact a flange, but are separated from the internal diameter of the remainder of the conduit section, as now defined in amended independent Claims 1 and 6. Instead, in Nichols, not only there is no flange defined, but in addition, the vanes 27 make direct contact with multiple portions of the internal diameter of hose 31. Thus, as all of the features recited in independent Claims 1 and 6 are not disclosed in the Nichols reference, Applicant respectfully requests the withdrawal of this §102(b) rejection of independent Claims 1 and 6, and associated dependent Claims 7, 8, 12 and 13.

Claims 4 and 10 stand rejected under 35 U.S.C. §103 as being unpatentable over Nichols. Applicant respectfully traverses this rejection.

Claims 4 and 10 each depend from either independent Claim 1 or from independent Claim 6, and therefore include all of the features of either Claim 1 or Claim 6, plus additional features. Accordingly, Applicant respectfully requests that these §103 rejection of dependent Claims 4 and 10 be withdrawn considering the above remarks directed to independent Claims 1 and 6.

Claims 1, 3-10, 12-22 and 27 stand rejected under 35 U.S.C. §103 as being unpatentable over United States Patent No. 6,619,331 to Suchdev in view of Nichols. Applicant respectfully traverses this rejection.

With regard to independent Claims 1 and 6, and associated dependent Claims 3-5, 7-10 and 12-15, Applicant respectfully traverses this rejection because the proposed combination does not disclose or suggest, *inter alia*, the claimed configuration of the vanes in

which radially outer edges of the vanes contact one of the first and second flanges, but are separated from said internal diameter of a remainder of said fluid conduit section, as recited in independent Claim 1 and 6, and as discussed above with regard to the Nichols reference (which was the reference relied upon for vanes). Further, the Suchdev reference does not remedy this deficiency, nor was it relied upon as such. Accordingly, because all of the features of independent Claims 1 and 6 are not disclosed or suggested in the cited references, Applicant respectfully requests the withdrawal of this §103 rejection of independent Claims 1 and 6 and associated dependent Claims 3-5, 7-10 and 12-15.

With regard to all of the claims recited in this rejection (Claims 1, 3-10, 12-22 and 27), Applicant respectfully submits that the Examiner has failed to provide a *valid* reason for adding the fish tank anti-kinking spine (11 or 21) of the Nichols reference to the locomotive engine of the Suchdev reference. The recent Supreme Court Case of KSR International Co. v. Teleflex Inc., has stated that for a combination to be obvious, there must be a reason for combining the elements to arrive at the claimed subject matter. 82 U.S.P.Q.2d 1385, 1396 (U.S. 2007).

On page 8 of the May 1, 2007 Office Action, the Examiner asserted that the reason to add the anti-kinking spine of the Nichols reference to the locomotive engine of the Suchdev reference was to "prevent kinking of the hose." As recited in the Nichols reference, "Flexible hoses are susceptible to kinking when bent over a tight radius." *See e.g.*, Nichols, col. 1, lines 14-15. When discussing the problem of kinking, the Nichols reference also makes numerous other references to the kinking problem being related to bending of the

hose. *See e.g.*, Nichols, col. 1, lines 19-60 and col. 2, line 67 – col. 3, line 13. Thus, the kinking problem only occurs when a flexible hose is bent, such as when an air hose of an aquarium is bent over a tight radius to be inserted into the water.

In contrast, the flexible hose 66 of the locomotive engine of the Suchdev reference does not contain a bend of any significance, but is instead "maintained in a substantially linear configuration between the housings." *See* Suchdev, col. 5, lines 51-52. In fact, maintaining the flexible house in a substantially linear configuration is one of the important features of the device of the Suchdev reference because if the pipe is bent, "the harsh environment, including the significant vibration, causes the metal braid to wear away the corrugated pipe." Suchdev, col. 5, lines 53-57. Since the flexible hose 66 of the Suchdev device lacks any significant bends, such as the bend found in the aquarium pipe of Nichols, there is no need for an anti-kinking device such as that disclosed in Nichols. Accordingly, as the Examiner has not provided a *valid* reason for adding the anti kinking spine of Nichols to the device of Suchdev, as required by the recent Supreme Court Case of KSR International Co. v. Teleflex Inc., Applicant respectfully requests the withdrawal of this §103 rejection of Claims 1, 6-8, 12 and 13.

For all of the above reasons, Applicant requests reconsideration and allowance of the claimed invention. Should the Examiner be of the opinion that a telephone conference

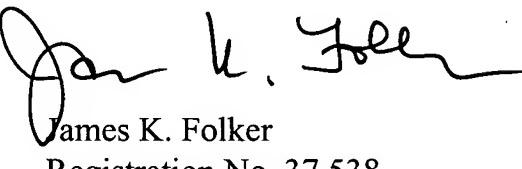
would aid in the prosecution of the application, or that outstanding issues exist, the Examiner is invited to contact the undersigned.

Respectfully submitted,

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